The following are the titles of other recently published articles on the Pathology of the Nervous System, and Mind and Pathological Anatomy:

Burresi, Tuberculosis of the Excitable Zone of the right cerebral Hemisphere. *Lo Sperimentale*, March, 1877; Morselli, Pathogeny of Epilepsy, Epileptiform attacks consecutive to Traumatic Lesions of the anterior cerebral Convolutions, *Ibid*; Morselli, Physio- Pathological Illustration of four cases of Disease of the Medulla oblongata and upper portion of the Spinal Cord, *Ibid*, May and Jan., 1877; Morselli, Contribution to the Psychology of Crime, Statistical and Anthropological Data of Criminal Suicides, *Archivio Italieno*, March and May, 1877; Livi, Etiology of Progressive Paresis, *Revista Sperimentale*, Jan. and March, 1877; Tamburini, New Observations of Osteoma of the Spinal Arachnoid in Progressive Paresis, *Ibid*; Hughlings Jackson, Nervous Symptoms with Ear Disease, *Lancet (Am. Repr.)*, June; Gerhard, Tremor as a Symptom of Nervous Disease, *Med. and Surg. Rep.*, June 23; Galli, Diphtheritic Paralysis, *Rivista Clinica*, March, 1877.

---

c.—THERAPEUTICS OF THE NERVOUS SYSTEM AND MIND.

Nitrite of Amyl.—The following are the classes of disorders in which nitrite of amyl is indicated, according to a recent memoir by Dr. Van Ermingan, analyzed by Dr. Carpenter-Mericourt *fils*. in the *Bull. Gen. de Therapeutique.*

I. Syncopal accidents, comatose, and characterized by feebleness or cardiac weakness with anæmia or venous congestion of the cerebro-spinal centres.

II. Diseases characterized by spasm of the vessels.

III. Diseases characterized by spasm of the voluntary or involuntary muscles.

IV. Diseases characterized by extreme elevation of temperature.

Three drops of amyl nitrite inhaled from a handkerchief overcome the threatening syncope of chloroform, and two drops have sufficed for a cure, but it is especially in angina pectoris and asthma that the best results have been obtained. Its employment is contra-indicated in aged persons or those who present indications of vascular alterations, or of heart disease, and it is also contra-indicated in plethoric females recently delivered.

It should be used in all cases with great care, as some serious inconveniences, to say the least, have been experienced by some persons from very small doses. Others again can inhale thirty or forty drops without suffering any serious discomfort.

The following are conclusions drawn from experiments with this agent, by W. D. Lane, and published in the *British Medical Journal*, Jan. 27:

1. Amyl nitrite when inhaled in small quantities, produces reddening of the face in man, and of the nose and mouth in kittens; this action is due, according to Brunton, to the dilatations and over-filling of the arterioles.
2. When inhaled by kittens in large quantities, it produces cyanosis of the nose and mouth along with insensibility. The cyanosis arises from over-distention of the venous system, this being due to the engorged arterioles propelling the blood into the veins, while the insensibility is probably caused by over-distention of the venous system and the heart.
3. When inhaled in small quantities, it produces recovery from chloroformic insensibility, by dilating the arterioles of the brain and thus removing the cerebral anæmia due to chloroform.
4. When inhaled in large quantities, instead of producing recovery from chloroformic insensibility, it not only retards it but it may cause death by paralysis and over-distention of the heart, and engorgement of the venous system.
5. It causes a rise of temperature when inhaled in large quantities by the increased amount of blood in the arterioles, causing an increased tissue-change in the body.
6. In large doses (inhaled) it produces a fall of temperature.
7. It also helps to produce recovery from the chloroformic insensibility by raising the temperature which is always lowered by chloroform, and by removing the paralysis of the heart due to chloroform; this action is well seen by the nitrite of amyl making the hearts beats fewer and its sounds louder.
8. Death is caused chiefly by paralysis of the heart, which is shown by all its cavities being distended, and by engorgement of the venous system.

Bromide of Lithium.—Bromide of lithium, introduced into therapeutics some years since is doubly valuable since it acts with equal energy as a sedative and a lithotriptic. In fact, its richness in bromine, 91.95 per cent. is very much superior to that of the other bromides, and its 8.05 per cent. of lithium is sufficient to neutralize a considerable quantity of uric acid, as one part of lithium neutralizes four parts of uric acid.

Thanks to this double action, demonstrated both in the Paris hospitals and in civil practice, the bromide of lithium is vaguely prescribed for the neuroses on the one hand, and on the other for the various manifestations of the uric diathesis. Experience, indeed, has demonstrated its powerful effects in epilepsy, chorea, insomnia, hypochondria, and in the diverse forms of the uric diathesis, such as gravel, nephritic colic, gout and diabetis.

In these last affections which are accompanied by the symptom pain, as in nephritic colic and gout, bromide of lithium besides its lithotriptic action, acts also as a sedative and calms in a few hours the sufferings of the patients.

In this special relation the bromide of lithium is a most valuable remedy in therapeutics and cannot be too much recommended to physicians.—*Presse Méd. Belge* (*La France Médicale*).

THE ACTION OF HYPNOTICS.—C. Binz, *Arch. f. exper. Path. u. Pharm.* VI., 5 and 6, Hft., 1877. (Abstr. in *Deutsche Med. Wochenschr.*) The author instituted a series of michrochemical researches on the action of certain hypnotic substances on the gray matter of the brain, with special relation to Preyer's theory that " the brain becomes inactive because the accumulated products of decomposition seize upon the oxygen that otherwise is metamorphosed in the brain." It followed from these experiments that morphia, for example, possesses a very characteristic and constant chemical acton on the brain, in so far that it renders the protoplasm of the sharp-contoured cells muddy, and darkens the intermediate substance. Similarly constituted bsdies, such as atropia, do not share this property. He lays down the following hypothesis: " Morphia, chloral, ether, and chloroform possess a strong affinity for the cortical substance of the brain in man. It holds for a time the hypnotics brought to it by the blood, and from the resulting alteration in its processes of tissue change is rendered incapable of calling into action the functions of the waking state.

The author further ascertained by narcotizing dogs and rabbits with trephined craniums, that anæmia of the brain occurred late in complete narcosis, so that this condition is a result of the narcotization and not the reverse. Hence it follows that anæmia is not to be considered as essential to sleep.

THE STATISTICS OF THERAPEUTICS.—MM. Lasegue and Regnauld, in the *Archives Génerales de Médecine*, Jan., 1877, have collected from all the available documents of the Paris hospitals, the following interesting statistics as to the quantities of various medicines there employed during the last twenty years. We extract only the figures relative to the quantities of certain remedies acting largely on the nervous system and its functions, and these figures include the more notable results of the research:

Of chloroform, the quantity annually used was 141 kilogrammes in 1855, which in 1875 had increased to 308 kilogrammes. Chloral, which only made its appearance in the hospitals in 1869, its consumption in that year was only five kilogrammes, but in 1875 it had risen to 360 kilogrammes.

Of bromide of potassium, the usage rose from three kilogrammes in 1855, and 22 kilogrammes in 1864 to 760 kilogrammes in 1875.

Opium held its own during the period comprised in the investigation; its annual consumption ranging from 150 to 200 kilogrammes. But the quantity of morphine used increased during the same period from 272 grammes to 10 kilogrammes, indicating the greater prevalence of the hypodermic method of administering opiates.

The use of alcoholics in all forms likewise made great advances during this period, of alcohol from 1,270 litres in 1855 to 37,587 in 1875, of brandy from four litres in 1862 to 4,108 in 1875, and of rum from 199 litres in 1855 to 5,682 at the more recent date.

Of other remedies the increase was as great as in those we have mentioned in but few, chlorate of potash, carbolic acid and cod liver oil being among the more remarkable. Some interesting general inferences may be drawn in reference to the tendencies of modern therapeutics from these figures, thus the increasing favor of anodynes and sedatives is certainly noteworthy. The results are very suggestive, and it is very desirable that similar researches be instituted over still more extensive fields and periods of time.

COUNTER IRRITATION IN NERVOUS DEBILITY AND SPINAL IRRITATION. —Dr. Arthur Gamgee, *Practitioner*, Feb., 1877, recommends the use of counter irritation of the back by means of the Linamentum Sinapis Co., (B. P.), in cases of nervous debility due to overwork, excitement of cranial and spinal centres, or disturbance of the nutritive balance, etc., including the symptoms of the condition often called neurasthenia. He claims that this is a very important and effective adjunct to the other means usually employed in these cases, such as iron, cod liver oil, phosphorus, etc. The explanation of the favorable action of this method of treatment in these cases, he thinks, is to be found in that it increases the vascular tonus of the nerve centres, a lowered condition of which, he believes, to be the underlying condition of this state of nervous debility, and its attendant phenomena of sleeplessness, etc. In conclusion, he says: "There are two points upon which I think it right to add some observations, so as to prevent my being misunderstood.

1. "The facts which are day by day being accumulated point to the existence of local vaso-motor mechanisms, which are subordinated to the general vaso-motor centre, (if such a centre really exists apart from the former), so that it is not only conceivable, but certain, that an affection of, or a change in, a local vaso-motor mechanism might be induced without a necessary affection of the general vaso-motor mechanism. A general high tonus does not, for example, imply that its possessor should have a tendency to sleep, for sleep is doubtless due to a positive cerebral anæmia, to the production of which the activity of a centre, specially connected with the cerebral circulation probably contributes.

2. "Whilst such counter-irritation as I have recommended appears to exert a tonic action on the vaso-motor centre, and on the body generally,

I am quite aware that several methods of counter-irritation produce an opposite effect. The shock and great depression which, especially in women, sometimes follow the application of blisters, seem to show that severe counter-irritation very frequently tends to depress rather than to raise the tone of the vascular system."

METALLOTHERAPY.—The following is the substance of a report of a commission appointed to examine the effects of the application of metals to anæsthetic surfaces, as given by M. Dumontpallier to the Soc. de Biologie, April 14, and abstracted in the *Progrés Médical.* The commission was composed of MM. Charcot, Luys and Dumontpallier, and they had added to their number MM. Landolt, Gellé and Regnard, for certain special researches. It had satisfied itself as to the correctness of the statements made by M. Burq. If in hemianæsthesic hysterical patients we apply to the anæsthetic skin pieces of gold, copper or zinc, the subject presently feels sensations of itching and of heat, and in a few moments we can ascertain the return of sensibility at this point, together with an increased temperature and strength. In the vicinity we also note symptoms of dysæsthesia. Special sensibility is influenced in the same way; thus the members of the commission have observed color blindness to disappear and deafness improved.

These remarkable phenomena are not produced alike in all subjects by the same metal; in some, gold alone is effective, in others there is an idiosyncracy for copper or for zinc. It is probable, moreover, that this action of the metal is due to electric currents developed in the skin. For instance, in one case the sensibility returned from the use of currents of the same strength as indicated by the galvanometer as those following the application of gold to the skin. The same phenomena occurred in organic hemianæsthesias, but curiously enough, the effects of the metallic applications were much more durable in these cases than in those of hysterical hemianæsthesia.

In the course of their experiments, the members of the commission had demonstrated one fact of very great physiological importance. According as, on the one side, the general or special sensibility reappears, the temperature increases and the muscular force is augmented, so on the homologous point on the sound side we observe a corresponding decrease of each of these. It appears as if one side lost what the other gained, that there was a veritable transfer of sensibility.

THE ANTAGONISM BETWEEN MORPHIA AND ATROPIA.—Prof. C. Binz, *Deutsche Med. Wochenschr*, Mar. 24, 1877.

Since the middle of the last decennium a series of investigators have occupied themselves with the question whether there exists a reciprocal antagonism between morphia and atropia. Bezold is the only one among them that admits it to a limited degree. The results of the others' researches are quite the reverse.

Clinical experience in the human subject is not in accord with them. Even to the most critical reader the opposed view obtrudes itself; and, indeed, so far that serious cases of atropia poisoning may be treated with the best hopes of success by the use of not too small doses of morphia and serious morphia intoxications, with very minute doses of atropia, in both cases hypodermically.

At the commencement of the present semester, in my lectures on experimental toxicology, the necessity was met with of testing this vexed question myself. I performed the simple experiment of poisoning a very young dog with morphia, so far as to completely paralyze its sensorium; its pulse, normal at 140, was reduced to 42, and was scarcely perceptible through the thoracic walls; its respiration at 22 and quite superficial, and the temperature in the rectum fell between three and four degrees (R.) below the normal. When .0005 gramme of sulphate of atropia in half a gramme of water was subcutaneously injected into the neck during the collapse. Within ten minutes the animal gave signs of resuscitation. The heart-stroke became easy to feel, and rose to 140; the respiration was 52 to the minute and powerful, only the bodily temperature showed no increase. The improvement in circulation and breathing was lasting, and the animal recovered. A long needle inserted into the ventricle of the heart, and an easily movable lever in the region of the diaphragm, both made conspicuous by means of pieces of white paper, enabled the audience to easily see the experiment.

The same result was repeated in an experiment upon a somewhat older dog, which also served as the subject of a farther series of experiments which I undertook with the assistance of Dr. Heubach, and with the use of the haemodynamometer and the kymographion.

The improvement in the blood tension, lowered by the morphia, is very striking. It sometimes doubles the weight of the mercurial column, thus, for example, it raises it from 70 to 140 millimetres. This always begins a few minutes after the injection of the antagonist poison. Its cause is the paresis of the cardiac inhibitory fibres of the vagus. Therefore the pulse is frequent and the separate excursions of the ventricles low. The heart, dilated in diastole, contains a large amount of blood, and is therefore readily felt through the ribs. These effects were manometrically observed for over an hour. The dog, then set free upon the ground, staggered off to a warm corner, where recovery always took place.

Our experiments have led me to the conviction that the objection to the use of atropia in morphia poisoning, raised by some seven experiments, is not well founded. I have not only never seen any combination of the effects of the two poisons in any hurtful sense, but the indirect elevation of the blood pressure from the heart, and the direct improvement of the respiration by excitation of the respiratory centres, are two remarkably favorable circumstances for recovery. The subject of morphia poisoning dies from immediate paralysis of both these functions. If they are sustained for a sufficiently long time, the organism has the opportunity to free itself of the poison through the urine, and perhaps through decomposition. And both of these results are much more likely to occur if substance change in the system is in good condition, and this cannot be the case when the blood pressure and respiration are below the normal.

Experiments on the measurable influence of morphia as an antidote in atropia poisoning are in progress. They seem to give less pronounced results, since dogs react unreliably to large doses of atropia. There is also less to be said, for the reason that the counter-action of the well-known excitation due to atropia by hypodermic administration of large doses of morphia has been less gainsaid.

It may be questioned whether, in all this, we have an "antagonism" or not. This word indicates a conception which may be taken in a broad or narrow, absolute or relative sense, as best suits, and according to his own stand-point every one will adopt or reject the term. But the fact that, under certain circumstances, the one poison lessens the effects of the other, does not depend at all upon this question.

XANTHIUM SPINOSUM.—Some months ago a Russian physician, Dr. Grzymala, announced that the leaves of a certain plant, the Xanthium spinosum, were a certain cure for hydrophobia, and adduced a hundred or more cases in his own experience in which it had proved efficacious. Of course this statement excited considerable interest, and some very natural disbelief among veterinarians. Accordingly MM. Trasbot and Nocard, of the Veterinary College of Alfort, France, instituted a series of experiments to test this reputed virtue of xanthium. They inoculated on the twenty-third day of last April, eleven dogs with the hydrophobic saliva, from an animal then living, but suffering from the disease. Six of these dogs were put upon a regular treatment with the remedy as advised by Dr. Grzymala, the other five were left without medication. Thirteen days after the inoculation, one of the dogs treated regularly with the xanthium presented all the symptoms of hydrophobia, and bit repeatedly a bitch that was confined with him. He died next day, and the bitch was immediately put upon a course of the drug, but died rabid twenty days later.

The other dogs inoculated were very young, and all died in a month or two with obscure nervous symptoms, too little characteristic to be stated as certainly hydrophobic. Not regarding these cases, however, there remains the fact that the two adult animals inoculated, died of well characterized rabies, is alone a sufficient proof that as an antidote, xanthium is a failure.

ELECTRICITY IN ORGANIC HEMI-ANÆSTHESIAS.—M. Magnan reported to the Soc. de Biologie April 2, (abstr. in *Gaz. des Hopitaux*) that he had been studying the effects of electric currents on hemi-anæsthesias of cerebral origin. The first day, in the same patient, he had to use thirty elements of the Trouvé battery to recall the sensibility; the next day twenty brought about the same result; the next fifteen, and so on. In these cases M. Magnan observed no transfer of sensibility like that noticed in hysterical patients.

ATROPIA IN EPILEPSY.—Dr. Suettin, *Mitth. der Vereins der Aerzte in Niederoesterreich* (abstr. by Seeligmuller in *Deutsch. Med. Wochenschr*). According to the author's experiments on guinea pigs artificially rendered epileptic, atropia in small doses acts absolutely as an inhibitor of reflex action, but in large doses it increases it. Therefore he recommends that in epilepsy in the human subject, which "depends on a reflex cramp of the vaso-motor centres" sulphate of atropia in small doses, a pill containing one-fifth of a milligramme to be taken five times a day. The author believes that the absence of the symptoms of atropia intoxication that are not unfrequently present when this quantity is given in solution, to be due to the slowness of absorption of the drug in the pill form. (Seeligmuller states that he has not infrequently observed slight intoxication symptoms follow the use of one milligramme of atropia administered in the form of a pill for the nocturnal sweats of phthisis.) This medication must be carried on for months in order to produce results.

THE EFFECTS OF THE HYPODERMIC INJECTION OF CERTAIN ALKALOIDS IN THE DOG.—At the meeting of the Soc. de Biologie, May 19, (rep. in *Gaz. des Hopitaux*) M. Laborde presented three dogs on which he had practiced subcutaneous injections in the one, of sulphate of quinine in the dose of one gramme, in the other of sulphate of cinchonine, dose seventy-five centigrammes, and in a third, sulphate of cinchonitine, the same quantity. The first, under the influence of quinine had attacks of vomiting and presented a complete loss of general sensibility.

The second, under the influence of cinchonine, offered a series of true epileptic attacks, absolutely similar to those we observe in man. the fall, initial cry, tonic convulsions, followed by clonic ones, foam at the mouth, biting of the tongue and stertor. M. Laborde observed that he had never produced so clear an epileptic attack, one so like to that in the human subject.

Finally, the third dog, under the influence of cinchonitine, after some convulsive attacks, more or less resembling the epileptiform attack, was siezed with a tremor analogous to that of paralysis agitans.

These experiments enables us to determine very clearly the different physiological effects of these alkaloids, quinine, cinchonine, and cinchonitine. They permit us, moreover, to affirm that, in a certain number of cases, where we administer to patients rather large doses of these substances, we render ourselves liable to produce in them these accidents.

NICOTINE AND STRYCHNIA.—Dr. F. L. Haynes, *Phil. Med. Times*, May 12, gives an account of the results of a series of experiments upon the action of nicotine and strychnia in relation to one another. The animals employed were rats, cats, rabbits and dogs. The minimum fatal dose of each agent upon each species of animal was first ascertained, then their combined action was tested. The conclusions arrived at are as follows:

1. Strychnia and nicotine are in no degree antagonistic poisons.
2. Strychnia increases the convulsive action and does not diminish the motor paralysis of nicotine.
3. Nicotine (even in paralyzing doses) increases the convulsive action of strychnia.
4. Both poisons cause death by paralyzing the respiratory apparatus. They may effect respiration in different ways, but the result is the same.
5. Animals may be killed by injecting together doses of the two drugs which, singly, are not fatal.

The author adds: "There is no reason to suppose that the above deductions are not applicable to the human animal. The symptoms of poisoning by the two drugs are identical in man or the lower animals. As regards strychnia, this is too well known to need further remark. In regard to nicotine, it is only necessary to refer the reader to the recorded cases of poisoning by that drug.

"It may not be out of place to mention the fact that experimentation has proven that nicotine and strychnia show a remarkable similarity in their intimate action on the nervous system, both being excitants of the spinal cord and paralyzers of the motor and efferent nerves. For the explanations of these assertions, and for many other deeply interesting facts connected with this subject, the reader is referred to other sources."

MASSAGE.—The following is an extract from the address of Dr. S. Weir Mitchell, of Philadelphia, before the Medical and Chirurgical Faculty of Maryland in Baltimore last April. The class of cases of which he speaks must be familiar to most physicians in large practice, and his successful experience is therefore of especial value. Dr. Mitchell says:

"In our great cities there exist a host of influences for evil which result in all classes, and especially in women, in the gradual creation of patients who, having lost weight and become anæmic, find it hard to regain that competency of capital in fat and blood without which the business of life is carried on at a dangerous cost. We search in vain in these cases for organic changes which may explain their conditon. No function is well performed, but it is useless to correct digestion or treat an ulcerated womb or order exercise. The blood is lacking to aid in the little gains we win, and exercise is valueless or worse when it exhausts tissues which lack the means of being rebuilded.

"I need not dwell on points so obvious to educated physicians. For many years past I have had my thoughts directed to this subject, and, like every one here, I have gone on month after month treating such cases with no better, and I hope, no worse fortune than has fallen to others. A moment of happy thought and much reflection since, led me to a method of treatment which has rewarded me over and over with successes so brilliant that, as the plan of cure involves some of those extreme measures of which I have been speaking, I may be pardoned for calling them to your attention.

"And perhaps also the path by which I reached my conclusions may not lack interest.

"Some years ago I saw a woman who was like half a dozen any of you can now recall, a pallid, feeble creature, who had menstruated irregularly until two years before, and then stopped at the age of thirty. She was the type of a class. Everything wearied her,—to walk, to read, to drive, to sew. She was the woman with a back, and a shawl on her shoulders, and a sofa for a home, and hysterics for a diversion. She had tired out the doctors, and exhausted drug shops and spas and travel, and outlived a nurse or two. The deformity man had found a spinal curvature and put on a brace; the gynæcologist had had his turn; the quacks had had their share; and she wore blue glasses to keep out the blessings of daylight. She was five feet four, and weighed ninety-four pounds, and had as much figure as a hat rack, and had no more breast than the average chicken of a boarding-house table. Nature had wisely prohibited this being from increasing her breed. How many of you have stood helpless before this woman? Like you, I had had my failures with such cases, and I was driven to reflect as to what new device I could try. Because everything tired her, I put her at rest in bed. I made rest despotic, absolute. Then I fed her with milk at brief intervals. But in a few days my plan failed. Rest she took to well enough, but attempts to feed resulted in sick stomach and diarrhœa and new loathing of food. Then I said I must find some way to give exercise without exertion. I had seen in Europe how much use was made of massage or kneading of the muscles. I knew that under its use the feeble limbs of ataxics strengthen for a time, so that hopeful friend even dream of a cure, and I was aware that it improved the local blood circulation in a remarkable way and gave to feeble and flabby tissues increase of tone and firm plumpness. It seemed to me that it could take the place of exercise for persons at rest.

"I had also in electricity another means of causing muscles to contract without tha action of will or the exhausting use of nerve-force.

"For the first time, then, I used on a woman at rest, through massage and the abrupt muscle-stirring of an induction current.

"To my great pleasure, I found in a few days a return of appetite and digestion. But is kneading the muscles a mere fetich also? What scientific test have we of its activity? One, and a sure one, which I have lately found. In weakly people, despite the exposure to the air it involves, this process raises the general temperature ½° to 1½° F. And as I discovered this winter, to my surprise and pleasure, an induction current, either localized or merely allowed to pass to and fro from neck to feet, does precisely the same. They effect tissue metamorphosis for the patient in tissues little used in bed.

"I have employed every degree of rest: but in this woman's case, as usually, I permitted no exertion which could be avoided, and I carried it to such an extreme as to have the patient fed by hand, because it is tiresome while recumbent to use the arms, and because I have found that human beings, like turkeys, can be made to eat more when fed by another agent.

"To this treatment in a few days may be added raw soup and butter, and malt extracts and iron in large doses.

"I fed this woman, with growing surprise at her power to digest as she reddened and fattened. And how did she fatten and redden? The nails became pink; the veins began to show in the limbs. At first, as always, the extremities became cold under massage, then they grew warm, and at last, when she was well, the massage no longer elevated her temperature. And this is the rule. And as to fat, it comes first on the face and neck, and then on the back and belly, and last on the limbs.

"By absolute rest, with massage and induction currents, you acquire power to overfeed, and the tissues are enabled to reclothe themselves with fat and, what is better, you can thus refill the blood vessels. I have quoted one real case—my first. But this is no place or occasion to relate cases, or to enter into details, as I shall elsewhere; but I may venture again to say a word as to two facts, even at the risk of being minute. During the treatment, slight hemorrhages from the nose are not uncommon, but the return of regular menstruation is a better test of the rapid gain in blood. It nearly always becomes regular, and in three cases has returned during the first month of treatment, after absence respectively of three, five, and eight years.

"The gain of fat is sometimes at the rate of one-half pound a day. I have seen it reach three-fourths of a pound a day, but these rates are rare.

"The applications of this treatment are many. I have used it in numbers of cases, selecting at first such as had no hopeless organic disease. I have also used it to prepare feeble people for surgical operations, and within a year I have ventured to treat in this peculiar way people in the early stages of pulmonary phthisis. I have seen as to these, some notable facts, and have learned that in some such cases rest and over-feeding are of true curative value; for this is one of the doctor's best lessons that there may be one way or several to a cure. In the early stages of phthisis we have all come to think air and exercise and out-door life the one thing needful or hopeful, and I may be thought insane to propose to treat such cases by rest and excessive feeding; but I promised at the outset to give you personal and practical experience, and this is one; and now and then I have seen it do good service."

It will be noticed that it is intimated above that Dr. Mitchell proposes to give the details, etc., of this treatment more fully elsewhere. There is no doubt of the value of the method in many cases that are otherwise among the opprobia of therapeutics and full accounts of his experience with it, by so eminent and accomplished a physician, will be of very decided value to the profession.

MASSAGE IN WRITERS CRAMP.—Dr. Douglas Graham, *N. Y. Med. ecord,R* April 28, besides three cases quoted from foreign journals, reports several cases of muscular trouble from over-exercise of certain sets of muscles, and one or two of incipient writers cramp that were cured or materially benefited by massage. In one case, that of a pianist, it was of no benefit as far as applied.

As a statement of the indications for the use of massage in these and other cases, he quotes the following from Althaus, which though made in regard to the constant galvanic current, apply also to this method of treatment: "A really effective treatment of scriveners palsy must be an agent which is at the same time both tonic and sedative in its neuropathical effects, which must have the power of restoring the circulation of the blood in the suffering parts to its proper condition; which is capable of promoting the absorption of serous effusions, and will thus cause the nutrition of the maimed ganglia to be raised to a normal standard." This, Dr. Graham thinks, is the real action of massage, and the favorable results he here reports, together with those of the Scandinavian and German physicians whom he quotes, certainly indicates the reasonableness of its thorough trial in these often so obstinate affections.

The following are the titles of a few of the articles that have recently appeared on the Therapeutics of the Nervous System and Mind:

ANGRISANI, Bromids of Potish in the Neuroses and other affections of the Heart, *Rivista Clinica De Bologna*, March; LIEBREICH, On Chloral, *Practitioner*, June; WOOD, On the Action of Drugs on the Motor System of Animals, *Phil Med. Times*, Jan. 20; MACDONALD, Hydrate of Chloral, *St. Louis Clin. Record*, July; FUERSTNER, on the Treatment of Drunkards, *Allg. Zeitschr f. Psychiatrie* XXXIV; FISCHER, On the Hypnotic Action of Lactic Acid, *Ibid*, XXXIII 5 and 6.